Patent Pending

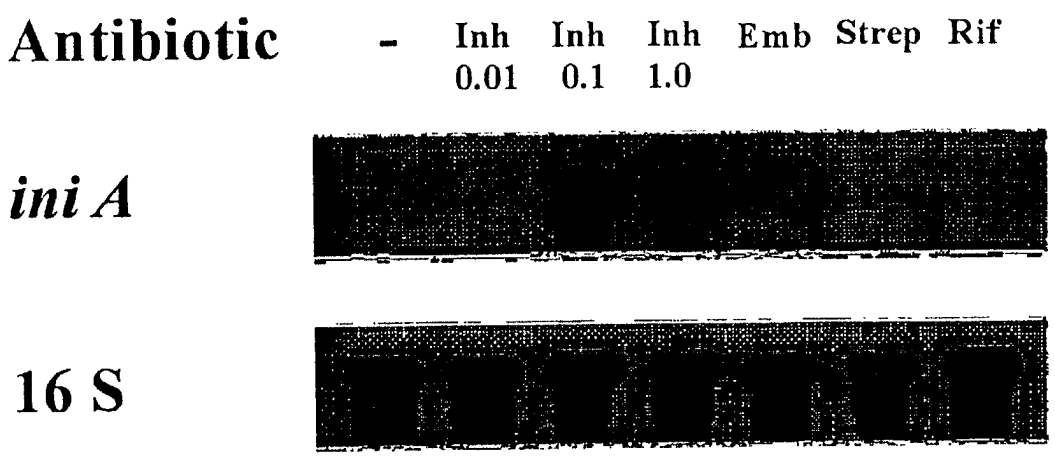

Figure 1

PATENT TRADEMARK

Strain ***M. tuberculosis*** **(Erdman)**

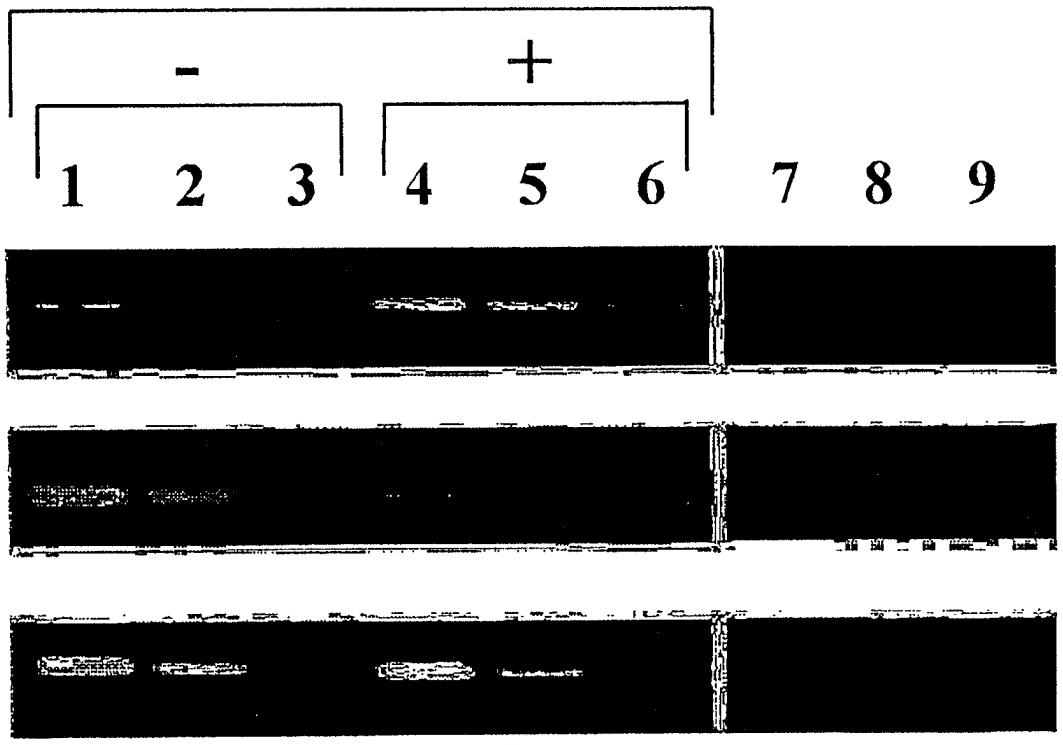

Figure 2A

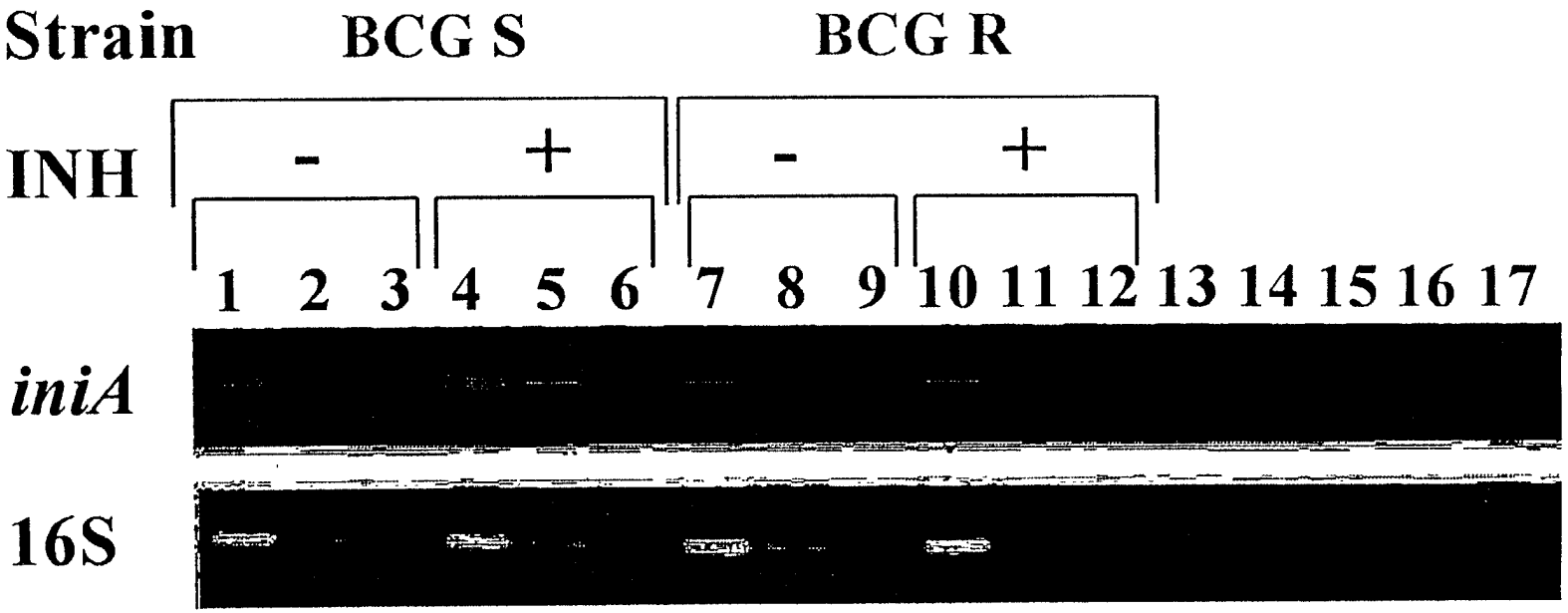

Figure 2B

Figure 3

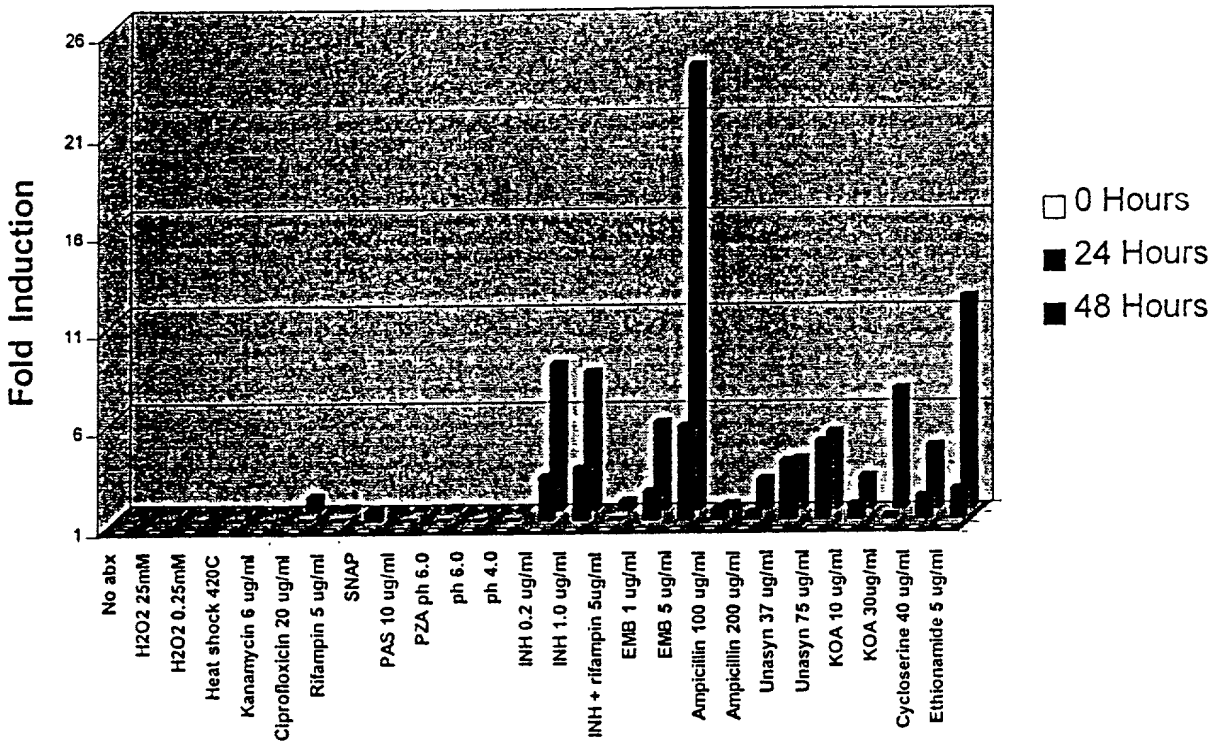
Fold Induction
26
21
16
11
6
1
No abx
H2O2 25mM
H2O2 0.25mM
Heat shock 420C
Kanamycin 6 ug/ml
Ciprofloxicin 20 ug/ml
Rifampin 5 ug/ml
SNAP
PAS 10 ug/ml
PZA ph 6.0
ph 6.0
ph 4.0
INH 0.2 ug/ml
INH 1.0 ug/ml
INH + rifampin 5ug/ml
EMB 1 ug/ml
EMB 5 ug/ml
Ampicillin 100 ug/ml
Ampicillin 200 ug/ml
Unasyn 37 ug/ml
Unasyn 75 ug/ml
KOA 10 ug/ml
KOA 30ug/ml
Cycloserine 40 ug/ml
Ethionamide 5 ug/ml
0 Hours
24 Hours
48 Hours

Figure 4

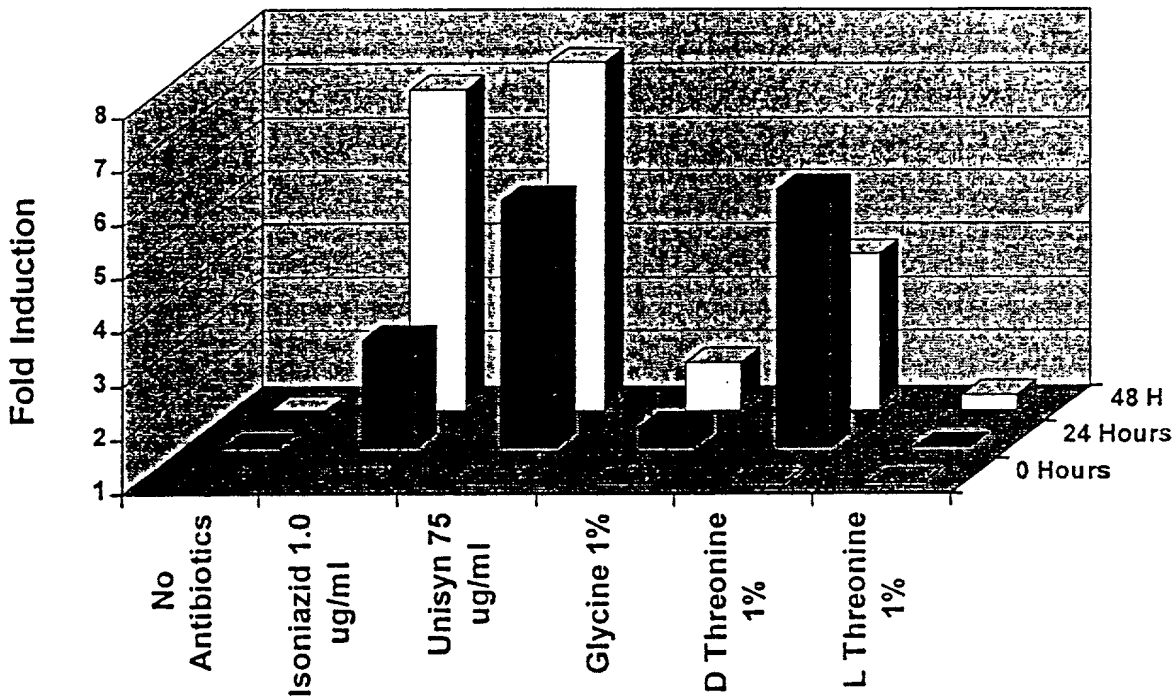
Fold Induction
8
7
6
5
4
3
2
1
48 H
24 Hours
0 Hours
No Antibiotics
Isoniazid 1.0 ug/ml
Unisyn 75 ug/ml
Glycine 1%
D Threonine 1%
L Threonine 1%

Figure 5

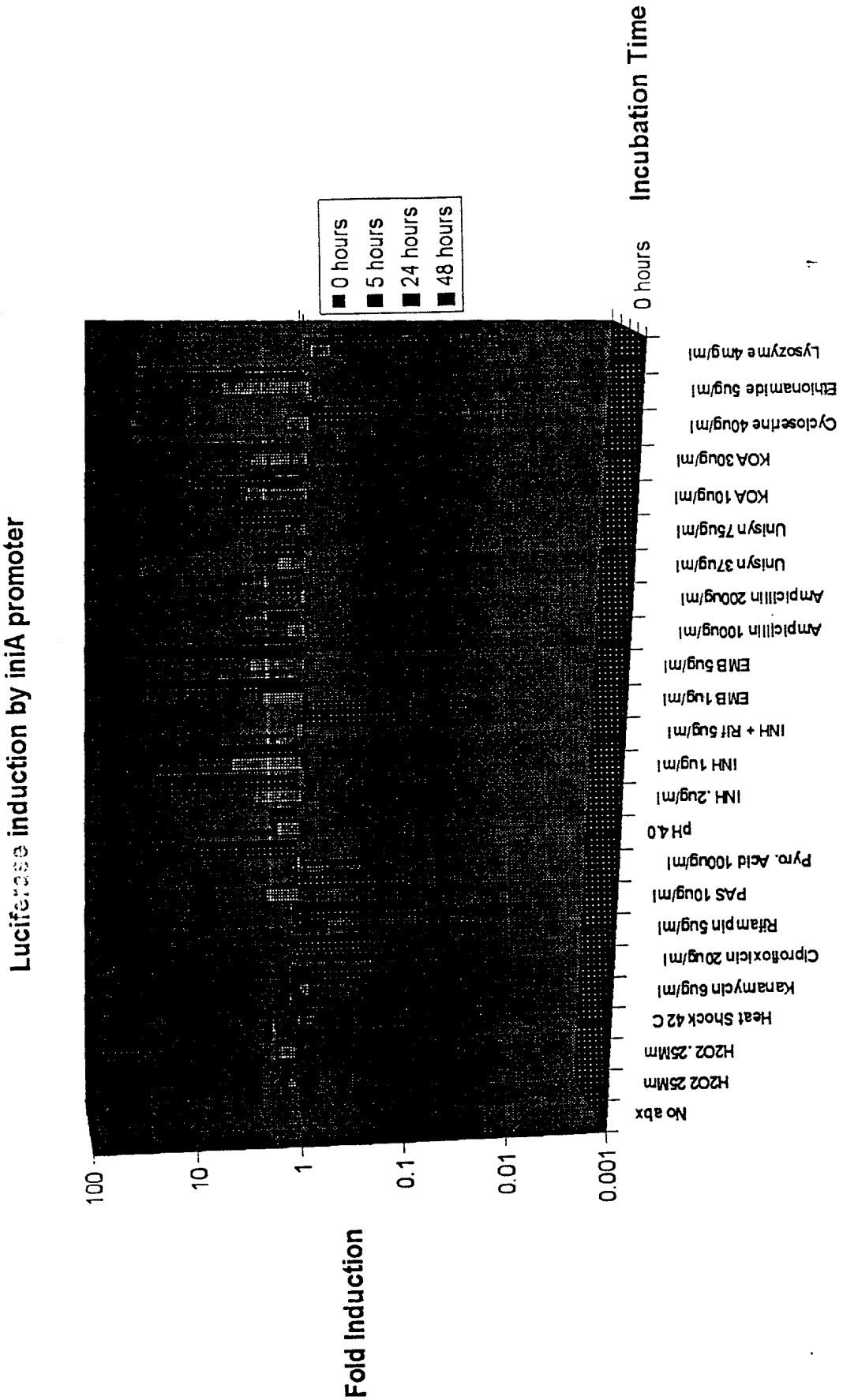
Luciferase induction by iniA promoter
Fold Induction
100
10
1
0.1
0.01
0.001
0 hours
5 hours
24 hours
48 hours
Incubation Time
0 hours
No abx
H2O2 25Mm
H2O2 .25Mm
Heat Shock 42 C
Kanamycin 5ug/ml
Ciprofloxicin 20ug/ml
Rifampin 5ug/ml
PAS 10ug/ml
Pyro. Acid 100ug/ml
pH 4.0
INH .2ug/ml
INH 1ug/ml
INH + Rif 5ug/ml
EMB 1ug/ml
EMB 5ug/ml
Ampicillin 100ug/ml
Ampicillin 200ug/ml
Unisyn 37ug/ml
Unisyn 75ug/ml
KOA 10ug/ml
KOA 30ug/ml
Cycloserine 40ug/ml
Ethionamide 5ug/ml
Lysozyme 4mg/ml

Figure 6A

Cosmid MTCY279:

9048 cac ggctacgaca
9061 tccacggata agttccggac cggcgtaggg gtgccccatt

Cosmid MTY13E10:

1 tcccctaatc ccctaacgcg gcggccaggc cgatcccgat aggtgtttgg ccggcttgcg
61 gatcagaccc cgatttcggg gtgaggcgga atccatagcg tcgatggcac agcgccggtc
121 acgccggcga acagcttctt cgattgaagg gaaatgaaga tgacctcgct tatcgattac
181 atcctgagcc tgttccgcag cgaagacgcc gcccggtcgt tcgttgccgc tccgggacgg
241 gccatgacca gtgccgggct gatcgatatc gcgccgcacc aaatctcatc ggtggcggcc
301 aatgtggtgc cgggtctgaa tctgggtgcc ggcgacccca tgagcggatt gcggcaggcc
361 gtcgccgctc ggcatggctt tgcgcaggac gtcgccaatg tcggcttcgc cggtgacgcg
421 ggcgcggggg tggcaagcgt catcacgacc gatgtcggtg cgggcctggc tagcggactg
481 ggtgctgggt tcctgggtca gggtggcctg gctctcgccg cgtcaagcgg tggtttcggc
541 ggtcaggtcg gcttggctgc ccaggtcggt ctgggtttta ctgccgtgat tgaggccgag
601 gtcggcgctc aggttggtgc tgggttaggt attgggacgg gtctgggtgc tcaggccggt
661 atgggctttg gcggcggggt tggcctgggt ctgggtggtc aggccggcgg tgtgatcggt
721 gggagcgcgg ccggggctat cggtgccggc gtcggcggtc gcctaggcgg caatggccag
781 atcggagttg ccggccaggg tgccgttggc gctggtgtcg gcgctggtgt cggcggccag
841 gcgggcatcg ctagccagat cggtgtctca gccggtggtg ggctcggcgg cgtcggcaat
901 gtcagcggcc tgaccggggt cagcagcaac gcagtgttgg cttccaacgc aagcggccag
961 gcggggttga tcgccagtga aggcgctgcc ttgaacggcg ctgctatgcc tcatctgtcg
1021 ggcccgttag ccggtgtcgg tgtgggtggt caggccggcg ccgctggcgg cgccgggttg
1081 ggcttcggag cggtcgggca cccgactcct cagccggcgg ccctgggcgc ggctggcgtg
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1201 ggggtcggcg gggcacacgg cgacatcctg ggccacgagg gagccgcact gggcagtgtc
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1621 ccggtgggga cgttcatggt ccccgccggt ttgtgcgcat accgtgatct gaggcgtaaa
1681 cgagcgagaa agtggggcga cacggtgacc cagcccgatg acccacgtcg ggtcggtgtg
1741 atcgtcgaac tgatcgatca cactatcgcc atcgccaaac tgaacgagcg tggtgatcta
1801 gtacagcggt tgacgcgggc tcgccagcgg atcaccgacc cgcaggtccg tgtggtgatc

Figure 6B

1861 gccgggctgc tcaaacaggg caagagtcaa ttgctcaatt cgttgctcaa cctgcccgcg
1921 gcgcgagtag gcgatgacga ggccaccgtg gtgatcaccg tcgtaagcta cagcgcccaa
1981 ccgtcggccc ggcttgtgct ggccgccggg cccgacggga caaccgcagc ggttgacatt
2041 cccgtcgatg acatcagcac cgatgtgcgt cgggctccgc acgccggtgg ccgcgaggtg
2101 ttgcgggtcg aggtcggcgc gcccagcccg ctgctgcggg gcgggctggc gtttatcgat
2161 actccgggtg tgggcggcct cggacagccc cacctgtcgg cgacgctggg gctgctaccc
2221 gaggccgatg ccgtcttggt ggtcagcgac accagccagg aattcaccga acccgagatg
2281 tggttcgtgc ggcaggccca ccagatctgt ccggtcgggg cggtcgtggc caccaagacc
2341 gacctgtatc cgcgctggcg ggagatcgtc aatgccaatg cagcacatct gcagcgggcc
2401 cgggttccga tgccgatcat cgcagtctca tcactgttgc gcagccacgc ggtcacgctt
2461 aacgacaaag agctcaacga agagtccaac tttccggcga tcgtcaagtt tctcagcgag
2521 caggtgcttt cccgcgcgac ggagcgagtg cgtgctgggg tactcggcga aatacgttcg
2581 gcaacagagc aattggcggt gtctctaggt tccgaactat cggtggtcaa cgacccgaac
2641 ctccgtgacc gacttgcttc ggatttggag cggcgcaaac gggaagccca gcaggcggtg
2701 caacagacag cgctgtggca gcaggtgctg ggcgacgggt tcaacgacct gactgctgac
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2881 gccacagcgg tcggcgacaa cttcgtgtgg gcataccagc gttccgaagc gttggccgac
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4201 gcgcgggccg catcgacgcg atgctctcgg ccaacgacgt ggccaagcgg ttcacccgcg
4261 aactgaacca gatgggcatt tgccaggcgg tggtgccggt atccggactt cttgcgctga

Figure 6C

4321 ccgcgcgcac actgcgccag accgagttca tcgcgctgcg caagctggcc ggtgccgagc
4381 gcaccgagct caatagggcc ctgctgagcg tggaccgttt tgtgcgccgg gacagtccgc
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4921 aacactggcg tcgccgtgcg gcgcatccac tcaacgatcc gttcactacc agggcctgtc
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Docket No. 52960

Figure 7

Rv0341 (iniB)

MTSLIDYILSLFRSEDAARSFVAAPGRAMTSAGLIDIAPHQISSVAANVVPGLNLGAGDPMSGL
RQAVAARHGFAQDVANVGFAGDAGAGVASVITTDVGAGLASGLGAGFLGQGGLALAASSGG
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FGAVGHPTPQPAALGAAGVVAKTEAAAGVVGGVGGATAAGVGGAHGDILGHEGAALGSVDT
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Rv0342 (iniA)

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DGTTAAVDIPVDDISTDVRRAPHAGGREVLRVEVGAPSPLLRGGLAFIDTPGVGGLGQPHLSA
TLGLLPEADAVLVVSDTSQEFTEPEMWFVRQAHQICPVGAVVATKTDLYPRWREIVNANAAH
LQRARVPMPIIAVSSLLRSHAVTLNDKELNEESNFPAIVKFLSEQVLSRATERVRAGVLGEIRSA
TEQLAVSLGSELSVVNDPNLRDRLASDLERRKREAQQAVQQTALWQQVLGDGFNDLTADVD
HDLRTRFRTVTEDAERQIDSCDPTAHWAEIGNDVENAIATAVGDNFVWAYQRSEALADDVA
RSFADAGLDSVLSAELSPHVMGTDFGRLKALGRMESKPLRRGHKMIIGMRGSYGGVVMIGML
SSVVGLGLFNPLSVGAGLILGRMAYKEDKQNRLLRVRSEAKANVRRFVDDISFVVSKQSRDRL
KMIQRLLRDHYREIAEEITRSLTESLQATIAAAQVAETERDNRIRELQRQLGILSQVNDNLAGL
EPTLTPRASLGRA

Rv0343 (iniC)

MSTSDRVRAILHATIQAYRGAPAYRQRGDVFCQLDRIGARLAEPLRIALAGTLKAGKSTLVNAL
VGDDIAPTDATEATRIVTWFRHGPTPRVTANHRGGRRANVPITRRGGLSFDLRRINPAELIDL
EVEWPAEELIDATIVDTPGTSSLACDASERTLRLLVPADGVPRVDAVVFLLRTLNAADVALLKQI
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TARTLRQTEFIALRKLAGAERTELNRALLSVDRFVRRDSPLPVDAGIRAQLLERFGMFGIRMSI
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